

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Original) A transgenic plant cell transformed by a Oxidoreductase Stress- Related Protein (ORSRP) coding nucleic acid, wherein expression of said nucleic acid in the plant cell results in increased tolerance to an environmental stress as compared to a corresponding non-transformed wild type plant cell.
- 2-4. (Canceled)
5. (Currently amended) The transgenic plant cell of ~~claims 1-4~~ claim 1, wherein the ORSRP coding nucleic acid is selected from the group ~~comprising~~ consisting of SEQ ID No. ~~NO:~~ 1, 3, 5, 7, 9, 11, 13, ~~of yeast and/or SEQ ID No.~~ 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49 ~~of plants and/or~~ and homologs thereof.
- 6-7. (Canceled)
8. (Currently amended) The transgenic plant cell of ~~claims 1-7~~ claim 1 wherein the plant cell is derived from a monocotyledonous plant.
9. (Currently amended) The transgenic plant cell of ~~claims 1-7~~ claim 1 wherein the plant cell is derived from a dicotyledonous plant.
10. (Currently amended) The transgenic plant cell of ~~claims 1-9~~ claim 1, wherein the plant cell is derived from a plant is selected from the group consisting of maize, wheat, rye, oat, triticale, rice, barley, soybean, peanut, cotton, rapeseed, canola, manihot, pepper, sunflower, borage, ~~safflower~~ safflower, linseed, primrose, rapeseed, turnip rape, tagetes, solanaceous plants, potato, ~~tabacco~~ tobacco, eggplant, tomato, Vicia species, pea, alfalfa, coffee, cacao, tea, Salix species, oil palm, coconut, perennial grass, forage crops and Arabidopsis thaliana.
11. (Currently amended) The transgenic plant cell of ~~claims 1-7~~, claim 1 wherein the plant cell is derived from a gymnosperm plant.

12. (Canceled)

13. (Currently amended) A transgenic plant generated from a plant cell according to ~~claims 1-10~~ claim 1 and which is a monocot or dicot plant.

14. (Canceled)

15. (Currently amended) A transgenic plant generated from a plant cell according to ~~claims 1-7, 11 or 12~~ claim 1 and which is a gymnosperm plant.

16-17. (Canceled)

18. (Currently amended) A plant expression cassette comprising a ORSRP coding nucleic acid selected ~~of a group comprising~~ from the group consisting of SEQ ID No. NO: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, and 49 or parts thereof operatively linked to regulatory sequences and/or targeting sequences.

19. (Original) An expression vector comprising a ORSRP encoding nucleic acid selected ~~of a group comprising~~ from the group consisting of SEQ ID No. NO: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, and 49 or parts thereof or a plant expression cassette of claim 18, whereby expression of the ORSRP coding nucleic acid in a host cell results in increased tolerance to environmental stress as compared to a wild type host cell.

20. (Canceled)

21. (Currently amended) An isolated Oxidoreductase Stress Related Protein (ORSRP) which is selected from the group ~~comprising~~ consisting of SEQ ID No. NO: 16, 18, 20, 22, 24, 44 and 50.

22-24. (Canceled)

25. (Currently amended) An isolated Oxidoreductase Stress Related Protein (ORSRP) encoding a nucleic acid selected from the group ~~comprising~~ consisting of SEQ ID No. NO: 15, 17, 19, 21, 23, 45 and 49.

26-28. (Canceled)

29. (Original) A method of producing a transgenic plant comprising an ORSRP coding nucleic acid, wherein expression of the nucleic acid in the transgenic plant results in increased tolerance to environmental stress as compared to a corresponding non-transformed wild type plant, comprising

- a) transforming a plant cell with an expression vector comprising the nucleic acid,
- b) generating from the plant cell a transgenic plant with an increased tolerance to environmental stress as compared to a corresponding wild type plant.

30-31. (Canceled)

32. (Currently amended) The method of ~~claims 29-31~~ claim 29, wherein the ORSRP coding nucleic acid is selected from the group ~~comprising~~ consisting of SEQ ID No. ~~NO:~~ 1, 3, 5, 7, 9, 11, 13, ~~of yeast and/or SEQ ID No.~~ 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49 ~~of plants and/or~~ and homologs thereof.

33. (Canceled)

34. (Original) A method of modifying stress tolerance of a plant comprising, modifying the level of expression of an ORSRP in the plant.

35-40. (Canceled)

41. (Currently amended) The method of ~~claims 34-40~~ claim 34, wherein the plant is transgenic.

42-44. (Canceled)

45. (Currently amended) The method of ~~claims 34-44~~ claim 34, wherein ORSRP expression is modified by administration of an antisense molecule and/or by double stranded RNA interference that inhibits expression of ORSPR.

46. (Canceled)

47. (Currently amended) ~~Use of~~ A method for preparing a plant cell with increased environmental stress tolerance comprising transforming a plant cell with a ORSRP encoding nucleic acid selected from the group comprising consisting of SEQ ID No. ~~SEQ ID No.~~ NO: 1, 3, 5, 7, 9, 11, 13, of yeast and/or SEQ ID No. 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49 of plants and/or and homologs thereof for preparing a plant cell with increased environmental stress tolerance.

48. (Canceled)

49. (Currently amended) ~~Use of~~ A method for selection of plants with increased environmental stress tolerance comprising utilizing a ORSRP encoding nucleic acid selected from the group comprising consisting of SEQ ID No. ~~SEQ ID No.~~ NO: 1, 3, 5, 7, 9, 11, 13, of yeast and/or SEQ ID No. 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49 of plants and/or and homologs thereof or parts thereof as a DNA marker ~~markers for selection of plants with increased tolerance to environmental stress.~~

50. (Canceled)